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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HOLDER, REGINA NEAL

ART UNIT PAPER NUMBER

2651

DATE MAILED: 05/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/971,081

Applicant(s)

SON, OK-HYUN

Examiner

Regina N. Holder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 08/924,246.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other:

Reissue Applications

1. The reissue oath/declaration filed with this application is defective because none of the errors which are relied upon to support the reissue application are errors upon which a reissue can be based. See 37 CFR 1.175(a)(1) and MPEP § 1414. The oath does not specifically mention an error correctable by reissue for the new claims 16-34. If new claims are presented, their differences from the original claims must be pointed out. Merely stating the new claims are broader is not enough. Applicant should include a statement referring to the language, which was not necessary in the original claims for Applicant's claim to read over the prior art. For instance, Applicant may state that the phrases "skipping a remaining data address mark" or "detecting said address mark" were not required for patentability.

2. In accordance with 37 CFR 1.175(b)(1), a supplemental reissue oath/declaration under 37 CFR 1.175 (b)(1) must be received before this reissue application can be allowed.

3. Claims 1-34 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action. Receipt of an appropriate supplemental oath/declaration under 37 CFR 1.175(b)(1) will overcome this rejection under 35 U.S.C. 251.

4. The original patent, or a statement as to loss or inaccessibility of the original patent, must be received before this reissue application can be allowed. See 37 CFR 1.178.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 16, 20, 24, 26, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (5,742,582).

Regarding claim 16, Suzuki teaches writing a first data address mark and a second data address mark in a data block (data areas). See fig. 4 and col. 2 lines 52-58.

Regarding claim 20, Suzuki teaches a magnetic recording medium having a data track having one or more data blocks comprising first and second data address marks. See figs. 3 and 4 and col. 2 lines 52-58.

Regarding claim 24, Suzuki teaches at least one data block (data area) including first and second address marks and a controller configured to read at least one of the address marks, if the first mark is read successfully synchronizing the according to the first address mark and if the second address is read successfully synchronizing according to the second address mark. See fig. 4 and col. 2 lines 52-58. Although Suzuki does not specifically recite a controller, it is inherent that the address marks are detected and utilized by a controller for synchronization

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because this is the purpose of storing address marks on the medium. It is also inherent that the when the address marks are successfully detected they are used for synchronizing the user data access.

Regarding claim 26, Suzuki teaches recording at least two data address marks in a plurality of different locations along a data track, establishing synchronization by detecting at least one of the marks. See fig. 4 and col. 2 lines 52-58. It is inherent that detected data address marks are characterized as effective because if they were not detected, an error would have been characterized.

Regarding claim 31, Suzuki teaches recording a data address mark at a first location along a data track at a first location preceding a correspond data track and recording a second address mark at a second location preceding corresponding data track. See fig. 4 and col. 2 lines 52-58.

7. Claims 20, 26, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Gold (5,231,545).

Regarding claim 20, Gold teaches a magnetic recording medium having a data track having one or more data blocks comprising first and second data address marks. See fig. 1A.

Regarding claim 26, Gold teaches recording at least two data address marks in a plurality of different locations along a data track, establishing synchronization by detecting at least one of the marks. See fig. 1A. It is inherent that detected data address marks are characterized as effective because if they were not detected, an error would have been characterized.

Regarding claim 31, Gold (5,231,545) teaches recording a data address mark at a first location along a data track at a first location preceding a correspond data track and recording a

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second address mark at a second location preceding corresponding data track. See fig. 1A.

Although, Gold does not depict a second track, it is inherent that there are additional tracks, hence the first and second address marks in track 10 precede a location on a corresponding track.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 17, 21, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Gold. The teachings of Suzuki are described above with reference to claims 16, 20, and 26. However, Suzuki does not specifically recite different patterns.

Regarding claims 17, 21, and 28, Gold teaches writing plural data address marks. See fig. 1A. Gold also teaches that the data address marks comprise a plurality of bits. See col. 8 lines 20-27. Gold teaches that the AM only have to meet 3 criteria. See col. 8 lines 28-45. This teaching suggests that the plurality of address marks have different patterns. Hence, it would have been obvious to one of ordinary skill in the art to utilize the teaching of Gold to provide first and second data address marks comprising a plurality of bits and different patterns, motivation being to provide fault tolerant decoding as set forth in col. 1 lines 5-12 of Gold.

Regarding claim 32, Suzuki teaches a disk device comprising a head, a first data address mark, a second data address mark and a controller. See fig. 4 and col. 2 lines 52-58. Although Suzuki does not specifically recite a controller, it is well known to use a controller to detect and

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synchronize information on the medium. However, Suzuki does specifically recite different patterns.

Gold teaches writing plural data address marks. See fig. 1A. Gold also teaches that the data address marks comprise a plurality of bits. See col. 8 lines 20-27. Gold teaches that the AM only have to meet 3 criteria. See col. 8 lines 28-45. This teaching suggests that the plurality of address marks have different patterns. Hence, it would have been obvious to one of ordinary skill in the art to utilize the teaching of Gold to provide first and second data address marks comprising different patterns, motivation being to provide fault tolerant decoding as set forth in col. 1 lines 5-12 of Gold.

10. Claims 21, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gold. The teachings of Gold are described above with reference to claims 20 and 26. However, Gold does not specifically recite different patterns.

Regarding claims 21 and 28, Gold teaches writing plural data address marks. See fig. 1A. Gold also teaches that the data address marks comprise a plurality of bits. See col. 8 lines 20-27. Gold teaches that the AM only have to meet 3 criteria. See col. 8 lines 28-45. This teaching suggests that the plurality of address marks have different patterns. Hence, it would have been obvious to one of ordinary skill in the art to utilize the teaching of Gold to provide first and second data address marks comprising a plurality of bits and different patterns, motivation being to provide fault tolerant decoding as set forth in col. 1 lines 5-12 of Gold.

Regarding claim 32, Gold teaches a disk device comprising a head, a first data address mark, a second data address mark and a controller. See figs. 1A and 5. However, Gold does specifically recite different patterns.

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Gold teaches writing plural data address marks. See fig. 1A. Gold also teaches that the data address marks comprise a plurality of bits. Gold teaches that the AM only have to meet 3 criteria. This teaching suggests that the plurality of address marks have different patterns. Hence, it would have been obvious to one of ordinary skill in the art to utilize the teaching of Gold to provide first and second data address marks comprising different patterns, motivation being to provide fault tolerant decoding as set forth in col. 1 lines 5-12 of Gold.

Allowable Subject Matter

11. Claims 1-15 are allowed.
12. Claims 18, 19, 22, 23, 25, 27, 29, 30, 33, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not teach nor suggest at least one bit of the first plurality of bits represents a first byte count signifying a first number of bytes to be ignored when the first data address mark is normally read as set forth in claims 18 and 22. The prior art of record does not teach nor suggest reading a predetermined number of bits from a successfully read one of at least first and second mark and determining a number of bytes to be ignored based on the predetermined number of bits as set forth in claim 25, 29, 33, and 34. The prior art of record does not teach nor suggest skipping detection of other ones of the at least two data address marks from subsequent ones of the different recording locations as set forth in claim 27.

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Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina N. Holder whose telephone number is (703) 308-4078.

The examiner can normally be reached on 6:30 a.m. - 5:00 p.m. Mon.-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


Regina N. Holder
Primary Examiner
Art Unit 2651

rnh
May 28, 2002